ABSTRACT OF THE DISCLOSURE

A liquid-cooled welding device comprising a torch head body having a helical cooling fin extending along a length of the torch head body. A sleeve may be disposed around the torch head body to define a flow channel over the torch head body. The sleeve may have a liquid inlet and a liquid outlet to enable liquid to flow into and out of the flow channel. The liquid outlet may be located adjacent to the liquid inlet. The liquid-cooled welding device may have a baffle disposed within the sleeve between the liquid inlet and the liquid outlet to direct liquid to flow along the length of the torch head body to enable the helical cooling fin transfer heat to the liquid.